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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,682	07/15/2003	Sarah Elizabeth Witt	282536US8X	7074
22850 7590 04/01/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BRIER, JEFFERY A	
			ART UNIT 2628	PAPER NUMBER
			NOTIFICATION DATE 04/01/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/619,682	WITT ET AL.	
	Examiner	Art Unit	
	Jeffery A. Brier	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/27/2009 has been entered.

Response to Amendment

2. The amendment filed on 01/27/2009 has been entered.

The amendments to claim 16 overcomes the 35 USC 112 second paragraph rejection of claim 16 set forth in the office action mailed on 10/27/2008.

The amendments to claim 17 partially overcomes the 35 USC 112 first paragraph rejection of claim 17 set forth in the office action mailed on 10/27/2008 which will be explained below.

Response to Arguments

3. Applicant's arguments and amendments filed 01/27/2009 have been fully considered.

1) At page 7 last paragraph and page 8 first paragraph applicants discuss the amendments made to claim 16 and as discussed above the amendments to claim 16 overcomes 35 USC 112 second paragraph rejection of claim 16 set forth in the office action mailed on 10/27/2008

2) In the first full paragraph on page 8, in the paragraph spanning pages 8 and 9, and in the first full paragraph on page 9 applicants discuss the amendments made to claim 17 and as discussed above the amendments to claim 17 partially overcomes 35 USC 112 first paragraph rejection of claim 17 set forth in the office action mailed on 10/27/2008. The portions not overcome are at lines 20-24 since the claim does not specify who or what performs the “low-pass filtering”, “detecting”, “superposing”, and “generating”.

3) The indication of allowability of claims 1 and 3-8 is withdrawn in view of *Re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008). Method claims 1 and 3-8 are directed to patent ineligible subject matter since they fail the machine or transformation test, see page 1391.

page 1391:

A claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.

The step of generating a display signal is insignificant extra-solution activity. The result of the superposing is data which is being modulated as a generic display signal in the generating step, thus, the generating step is analogous to the recording discussed in *Bilski* in footnote 14.

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¹⁴ Although the Court spoke of “postsolution” activity, we have recognized that the Court’s reasoning is equally applicable to any insignificant extra-solution activity regardless of where and when it appears in the claimed process. See *In re Schrader*, 22 F.3d 290, 294 (Fed. Cir. 1994) (holding a simple recodation step in the middle of the claimed process incapable of imparting patent-eligibility under § 101); *In re Grams*, 888 F.2d 835, 839-

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40 (Fed. Cir. 1989) (holding a pre-solution step of gathering data incapable of imparting patent-eligibility under § 101).

Thus, method claims 1 and 3-8 fail to claim patent eligible subject matter and additionally claim 16 fails this test since it is written as method software claim.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 3-8, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Claims 1 and 3-8:

Method claims 1 and 3-8 are directed to patent ineligible subject matter since they fail the machine or transformation test, see page 1391.

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

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page 1391:

A claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.

1) All of the claimed steps are not tied to a “particular machine or apparatus”, thus, they fail step “(1)” of the machine or transformation test.

2) The generating, applying anti-aliasing filtering, preparing, first processing, and second processing steps are abstract ideas or mathematical algorithms and the step of generating a display signal is insignificant extra-solution activity, thus, all of the claimed steps fail step “(2)” of the machine or transformation test.

The result of the superposing is data which is being modulated as a generic display signal in the generating step, thus, the generating step is analogous to the recording discussed in *Bilski* in footnote 14.

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¹⁴ Although the Court spoke of “postsolution” activity, we have recognized that the Court’s reasoning is equally applicable to any insignificant extra-solution activity regardless of where and when it appears in the claimed process. See *In re Schrader*, 22 F.3d 290, 294 (Fed. Cir. 1994) (holding a simple recodation step in the middle of the claimed process incapable of imparting patent-eligibility under § 101); *In re Grams*, 888 F.2d 835, 839-40 (Fed. Cir. 1989) (holding a pre-solution step of gathering data incapable of imparting patent-eligibility under § 101).

The “for displaying” of the generating step is insignificant extra-solution activity since it is not tied to the process and since it fails to meet the requirements set forth at page 1397 regarding physical transformation: “(2) it transforms a particular article into a different state or thing”.

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Page 1397 states (emphasis added by underlining):

Our predecessor court's mixed result in *Abele* illustrates this point. There, we held unpatentable a broad independent claim reciting a process of graphically displaying variances of data from average values. *Abele*, 684 F.2d at 909. That claim did not specify any particular type or nature of data; nor did it specify how or from where the data was obtained or what the data represented. *Id.*; see also *In re Meyer*, 688 F.2d 789, 792-93 (CCPA 1982) (process claim involving undefined "complex system" and indeterminate "factors" drawn from unspecified "testing" not patent-eligible). In contrast, we held one of *Abele*'s dependent claims to be drawn to patent-eligible subject matter where it specified that "said data is X-ray attenuation data produced in a two dimensional field by a computed tomography scanner." *Abele*, 684 F.2d at 908-09. This data clearly represented physical and tangible objects, namely the structure of bones, organs, and other body tissues. Thus, the transformation of that raw data into a particular visual depiction of a physical object on a display was sufficient to render that more narrowly-claimed process patent-eligible.

We further note for clarity that the electronic transformation of the data itself into a visual depiction in *Abele* was sufficient; the claim was not required to involve any transformation of the underlying physical object that the data represented. We believe this is faithful to the concern the Supreme Court articulated as the basis for the machine-or-transformation test, namely the prevention of pre-emption of fundamental principles. So long as the claimed process is limited to a practical application of a fundamental principle to transform specific data, and the claim is limited to a visual depiction that represents specific physical objects or substances, there is no danger that the scope of the claim would wholly pre-empt all uses of the principle.

3) Method claim 1 is broader than each of claims 16 and 17, thus, emphasizing the preemptive nature of method claim 1.

4) In essence applicants generically claimed method of implementing the mathematical algorithm preempts all substantial uses of the claimed mathematical algorithm.

Claim 16:

1) This claim is written in the preamble as an apparatus claim and is written in the body of the claim as a software method without tying the method to a machine or physical transformation. Thus, claim 16 fails to claim patent eligible subject matter and in essence applicants generically claimed method of implementing the mathematical algorithm preempts all substantial uses of the claimed mathematical algorithm.

2) Claim 16 is broader than claim 17, thus, emphasizing the preemptive nature of the method performed by claim 16.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At lines 16-24 the second processing by the graphics synthesizer is claimed to perform the superposing function claimed at lines 16-20 but does not claim who or what performs the “low-pass filtering”, “detecting”, “superposing”, and “generating”. Thus, the metes and bounds of the claim is unclear. This is important since graphics synthesizer was added to the claim to overcome a 35 USC 112 first paragraph rejection.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. At lines 16-24 the second processing by the graphics synthesizer is claimed to perform the superposing function claimed at lines 16-20 but does not claim who or what performs the "low-pass filtering", "detecting", "superposing", and "generating" at lines 20-24.

Claim 17 is a computer readable storage medium claim. The specification at page 17 lines 16-18 and originally filed claims 12-15 do not convey applicant had possession of a "computer readable storage medium including a program stored thereon, ...when the program is executed on the system" in view of the limitations at lines 16-24, in view of the limiting effect of originally filed claims 12-15, and unclear nature of page 17 lines 16-18 and use of graphics synthesiser 200 coupled to vector unit 108 coupled to a computer (emotion engine 100's CPU core 102) to perform the process illustrated in figures 9A-9C and 10 and described in the specification at page 14 line 14 to page 17 line 15. Applicants originally filed claims, drawings, and specification fail to convey the open ended nature of lines 20-24 which applicant currently claims to be the invention in the computer readable storage medium.

Recent Federal Circuit decisions concerning generic claims:

Carnegie Mellon University v. Hoffmann-La Roche Inc., 88 USPQ2d 1233 (Fed. Cir. 2008), U.S. Court of Appeals Federal Circuit Nos. 2007-1266, -1267, Decided September 8, 2008, 541 F3d 1115; and

In re Alonso, 88 USPQ2d 1849 (Fed. Cir. 2008), U.S. Court of Appeals Federal Circuit, No. 2008-1079, Decided October 30, 2008, 545 F3d 1015.

A recently Federal Circuit decision concerning added generic claims: ICU MEDICAL, INC. v. ALARIS MEDICAL SYSTEMS, INC., No. 2008-1077, DECIDED: March 13, 2009.

Federal Circuit decisions concerning original generic claims:

LizardTech Inc. v. Earth Resource Mapping Inc., 76 USPQ2d 1724 (Fed. Cir. 2005); and

Lizardtech Inc. v. Earth Resource Mapping Inc., 77 USPQ2d 1391 (Fed. Cir. 2006).

Thus, legal precedent requires that a genus be described in such a manner to convey that applicant had possession of the genus in order to claim the genus and as discussed in ICU MEDICAL a contention that a genus would have been obvious is not enough to overcome this legal standard.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A. Brier whose telephone number is (571) 272-

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7656. The examiner can normally be reached on M-F from 7:30 to 4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached at (571) 272-7661. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jeffery A. Brier/
Primary Examiner, Art Unit 2628